# GeneChip®
Enzo Bioarray™ HighYield™
RNA Transcript Labeling Kit

An Essential Reagent Kit for Preparing Your Gene Expression Samples

Use the Enzo BioArray HighYield RNA Transcript Labeling Kit to produce biotin-labeled RNA targets by in vitro transcription from bacteriophage T7 RNA polymerase promoters. Using T7 RNA polymerase and biotin-labeled nucleotides, single-stranded, non-radioactive RNA molecules can be produced in vitro.

In vitro transcription reactions can now be performed using a single, convenient, high-performance kit that was developed specifically for use with Affymetrix GeneChip® expression analysis probe arrays.

Affymetrix highly recommends using this labeling kit in conjunction with the GeneChip expression analysis probe arrays for accurate and high yield results.
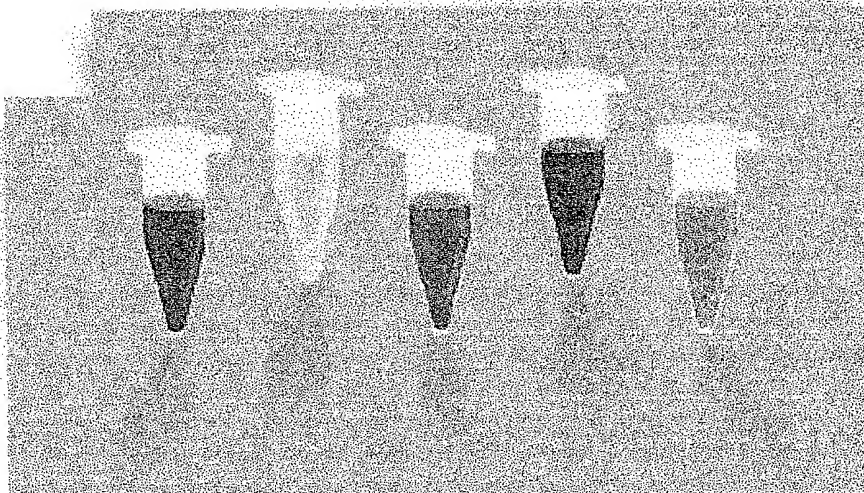
The BioArray HighYield Transcript Kit contains the following reagents:

- 10X Biotin Labeled Ribonucleotides
- 20X T7 RNA Polymerase
- 10X HY Reaction Buffer
- 10X DTT
- 10X RNase Inhibitor

Complete technical information regarding the use of this labeling kit is included in the GeneChip Expression Analysis Technical Manual.

Contact Affymetrix today for more information on how to place your order.

US and Canada
Tel: 800.223.5281
Fax: 408.481.9442

Europe
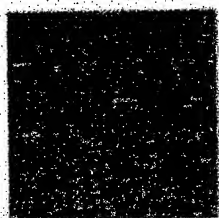**Tel: +44 (0)7000.785.803**
Fax: +44 (0)7000.785.804

www.affymetrix.com

Enzo
BioArray™

AFFYMETRIX
GeneChip®

products

application areas

└ **Expression Analysis**
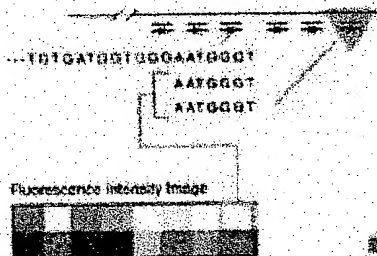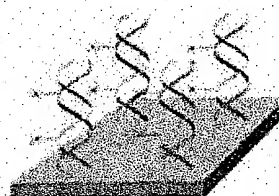
Expression Analysis

A. GeneChip expression arrays simultaneously and quantitatively interrogate thousands of mRNA transcripts (genes or ESTs), simplifying large genomic studies.

B. Each transcript is represented on a probe array by multiple probe pairs so that you can differentiate among closely related members of gene families.

C. Each probe cell contains millions of copies of a specific oligonucleotide probe, permitting the accurate and sensitive detection of low-intensity mRNA hybridization patterns.

D ifferential expression data can provide a clear understanding of cellular pathways and help identify valuable candidates for drug discovery - but only if you can trust the data. GeneChip expression analysis enables you to generate dependable data on demand.

GeneChip expression probe arrays simplify genomics research by quantitatively and simultaneously monitoring the expression of thousands of genes. Sensitive and specific, GeneChip probe arrays identify mRNA expression level changes of greater than twofold between experiments and are able to detect mRNA transcripts from the level of only a few copies per cell to more than several hundred thousand copies per cell.

In contrast to spotting methods in which a single clone is used to analyze each mRNA, GeneChip expression arrays use approximately 20 pairs of specific oligonucleotide probes to interrogate each transcript. This probe pairing strategy helps identify and minimize the effects of non-specific hybridization and background signal so that you can recognize low-intensity hybridization patterns from mRNAs sensitively and accurately. GeneChip expression arrays make it possible to specifically detect individual gene transcripts and splice variants and even differentiate among closely related members of gene families.

Each GeneChip expression array contains probes corresponding to a number of reference and control genes. Using reference standards, you can normalize data from different experiments and compare multiple experiments on a quantitative level.

Want more information?

The following documents are available in Adobe Acrobat (PDF) Format

(requires Adobe Acrobat)

- **Product Catalog**

- **GeneChip Expression Analysis Overview**

- **Expression Analysis Product Line**

- **GeneChip Custom Arrays**

- **GeneChip HuGeneFL Set**

- **GeneChip Mu6500 Set**

- **GeneChip Ye6100 Set**

- **GeneChip Test1**

- **Enzo BioArray™ High Yield™ RNA Transcript Labeling Kit**

Relevant Publications

View a complete bibliographic listing of relevant scientific publications.

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